

In the Claims

1. - 77. (Cancelled)

78. (new) A machine for washing articles which comprises a sealable enclosure for containing articles to which a mixture of detergent and water (washing liquid) is to be supplied, a heater tank and heater wherein the washing liquid is heated to a high temperature, a water-detergent pump by which the liquid is forced into the enclosure under a pressure of the order of 175psi (1.2MPa), and wherein the washing liquid is replaced with rinsing water and during rinsing the pressure in the enclosure is also maintained above ambient, and the washing liquid and the rinsing water are removed from the articles and from the interior of the enclosure by suction, and including a fine-mesh filter through which the washing liquid is forced to enter the enclosure, thereby to produce finely dispersed or diffused droplets forming a mist or vapour, whereby under the greater than atmospheric pressure in the enclosure, the washing liquid droplets are forced into at least the surface if not through and into the very structure of the material from which the articles are formed, so as to assist the cleaning process.
79. (New) A machine as claimed in claim 78 wherein the sealable enclosure is in the form of an elliptical capsule mounted for rotation about an axis through the mid point of its longer axis through the midpoint of its longer axis perpendicular to the latter and comprising a diameter of the cylindrical mid-region.

80. (New) A machine as claimed in claim 78, wherein after rinsing, drying of the articles is assisted by reducing the pressure in the enclosure below ambient, and suction to reduce the enclosure pressure is obtained by a venturi pump and water is supplied thereto under pressure by a pump, and after leaving the venturi pump, the water is conveyed to a sump which includes a return pipe for returning the water to the pump.
81. (New) A machine as claimed in claim 79, wherein after rinsing, drying of the articles is assisted by reducing the pressure in the enclosure below ambient, and suction to reduce the enclosure pressure is obtained by a venturi pump and water is supplied thereto under pressure by a pump, and after leaving the venturi pump, the water is conveyed to a sump which includes a return pipe for returning the water to the pump.
82. (New) A method of washing articles comprising the steps of:
- inserting an article or articles to be washed into a sealable capsule,
 - sealing the capsule,
 - mixing water with detergent,
 - heating and pressurising the mixture to a temperature around boiling point and to a pressure of the order of 175pse (1.2MPa),
 - introducing the mixture together with steam into the sealed capsule through a fine mesh filter so as to form finely dispersed droplets or a mist or vapour, while maintaining the mixture and the capsule interior at a pressure greater than ambient

- rotating the capsule to agitate the article or articles and effect a mixing of the liquid and steam therewith
- pumping the liquid from the capsule after a predetermined time,
- introducing clean water into the capsule, increasing the pressure in the capsule to above ambient and further rotating same to rinse the articles
- pumping the rinsing water from the capsule after a predetermined time
- continuing to pump the capsule so as to lower the pressure therein to below atmospheric for a further predetermined period of time to assist in evaporative drying of the article or articles therein, and
- removing the article or articles after establishing ambient pressure in the capsule.

83. (New) A method as claimed in claim 82 wherein removal of washing liquid from the capsule is effected by means of a venturi pump.

84. (New) A method as claimed in claim 83 wherein removal of rinsing water from the capsule is also effected by means of the venturi pump.

85. (New) A method as claimed in claim 83 wherein removal of air from the capsule to lower the pressure therein is also effected by means of the venturi pump.

86. (New) A method as claimed in claim 84 wherein removal of air from the capsule to lower the pressure therein is also effected by means of the venturi pump.

87. (New) A method as claimed in claim 83 wherein water is supplied under pressure from a pump to the venturi pump and after leaving the venturi pump the water is conveyed to a sump, from which water is drawn by the pump through a return pipe.
88. (New) A method as claimed in claim 84 wherein water is supplied under pressure from a pump to the venturi pump and after leaving the venturi pump the water is conveyed to a sump, from which water is drawn by the pump through a return pipe
89. (New) A method as claimed in claim 85 wherein water is supplied under pressure from a pump to the venturi pump and after leaving the venturi pump the water is conveyed to a sump, from which water is drawn by the pump through a return pipe
90. (New) A method as claimed in claim 86 wherein water is supplied under pressure from a pump to the venturi pump and after leaving the venturi pump the water is conveyed to a sump, from which water is drawn by the pump through a return pipe
91. (New) A method as claimed in claim 87 wherein water is supplied under pressure from a pump to the venturi pump and after leaving the venturi pump the water is conveyed to a sump, from which water is drawn by the pump through a return pipe